

Claims

What is claimed is:

- 1 1. A method for providing a library that is adapted to be instantiated into a runtime
2 object, the method comprising:
3 providing a template that corresponds to the structure of the runtime object with
4 element placeholders for elements and with attribute placeholders for attributes;
5 providing classes that form the library, wherein the classes correspond to the elements
6 and the classes have replacement instructions for the placeholders, with the replacement
7 instructions activated upon instantiating into the runtime object.
- 1 2. The method of claim 1 wherein the template includes element placeholders having
2 start portions and end portions differentiated by tag types.
- 1 3. The method of claim 2 wherein the template includes element placeholders having
2 element identification components belonging to the start portions and the end portions.
- 1 4. The method of claim 2 wherein the element placeholders include element
2 placeholders for a root element and for a branch element, with the start portions and the end
3 portions of the branch element placed between the start portions and the end portions of the
4 root element.
- 1 5. The method of claim 4 wherein the template includes the attribute placeholders
2 placed between the start portions and the end portions of the element placeholders.
- 1 6. The method of claim 5 wherein the template includes code portions in the language of
2 the runtime object placed between the start portions and the end portions of the element
3 placeholders.

1 7. The method of claim 1 wherein, in providing the template, single placeholders that
2 represent a plurality of elements include a plurality indicator for indicating that the single
3 placeholders represent a plurality of elements.

1 8. The method of claim 1 wherein, in providing classes, the attribute placeholder
2 changes a form of tags from tags of a first type into tags of a second type.

1 9. The method of claim 1 wherein providing classes comprises using XML-techniques.

1 10. The method of claim 1 wherein providing classes comprises organizing the classes in
2 an abstract syntax tree (AST).

1 11. The method of claim 1 wherein the template and classes are provided such that the
2 library is adapted to be instantiated into a runtime object selected from the group consisting
3 of application class file, application project file, common registry, machine specific
4 registry, business component, and website layout.

1 12. The method of claim 1 wherein the template and the classes are provided such that
2 the library is adapted to be instantiated into a runtime object in a language selected from the
3 group consisting of VBA, HTML, C++, C, Java, JavaScript, XML, and WML.

1 13. The method of claim 1, wherein each element has associated attributes, further
2 comprising:

3 identifying data for the attributes associated with each of the elements; and

4 instantiating the classes by activating the replacement instructions to replace the
5 attribute placeholders with the data.

1 14. An article of manufacture comprising a computer-usable medium storing computer-
2 readable program code for causing a processor to perform operations comprising:

3 providing a runtime object having elements and attributes, with each element having
4 associated ones of the attributes;

5 pre-assembling the runtime object using classes in a library, wherein the classes
6 correspond to the elements, the classes include replacement instructions for attribute
7 placeholders, and the classes are based on a template that corresponds to a structure of the
8 runtime object, with the template including element placeholders for the elements and
9 attribute placeholders for the attributes;

10 identifying data for the attributes associated with each of the elements; and

11 instantiating the classes by activating the replacement instructions to replace the
12 attribute placeholders with the data.

1 15. The article of claim 14 wherein the template includes element placeholders having
2 start portions and end portions and the attribute placeholders are placed between the start
3 portions and the end portions of the element placeholders.

1 16. The article of claim 15 wherein the template includes code portions in the language of
2 the runtime object placed between the start portions and the end portions of the element
3 placeholders.

1 17. The article of claim 14 wherein the library is adapted to be instantiated into a runtime
2 object in a language selected from the group consisting of VBA, HTML, C++, C, Java,
3 JavaScript, XML, and WML.

1 18. A computer program stored on a computer-readable medium and comprising
2 processor instructions for providing a library adapted to be instantiated into a runtime
3 object, the processor instructions comprising:
4 first instructions for providing a template that corresponds to a structure of the runtime
5 object with element placeholders for elements and with attribute placeholders for attributes;
6 and
7 second instructions for providing classes that form the library, wherein the classes
8 correspond to the elements and the classes have replacement instructions for the
9 placeholders that are activated upon instantiating into the runtime object.

1 19. The computer program of claim 18 wherein the the library is adapted to be
2 instantiated into a runtime object selected from the group consisting of application class
3 file, application project file, common registry, machine specific registry, business
4 component, and website layout.

1 20. A computer system for providing a library adapted to be instantiated into a runtime
2 object, the computer system comprising:

3 means for providing a template that corresponds to a structure of the runtime object
4 with element placeholders for elements and with attribute placeholders for attributes; and

5 means for providing classes that form the library, wherein the classes correspond to
6 the elements and the classes have replacement instructions for the placeholders that are
7 activated upon instantiating into the runtime object.